

**Notice of Allowability**

Application No.

09/574,840

Examiner

Christopher M. Kalivoda

Applicant(s)

MENDOZA ET AL.

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to After Final Amendment received on 09/08/2005.
2. ☒ The allowed claim(s) is/are 1-11, 18, 20, 22-30, 34-39 and 41-46.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |                                                                                                                     |                                                                                                              |
|---------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                         | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)                                  |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>09/19/05</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br>Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                                          |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material          | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                         |
|                                                                                                                     | 9. <input type="checkbox"/> Other _____                                                                      |

### **Reasons for Allowance**

#### **Examiner's Amendment**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

In accordance with discussions made in a telephone interview with the inventor's representative, Mr. David Randall on September 22, 2005, the following changes have been made:

- a. In the abstract, line 9, after the first word properties, add -- , such as --.
- b. In the abstract, line 9, delete both the left parenthesis " ( " and right parenthesis " ).
- c. In the abstract, starting in line 9 to line 12, delete the sentence, "The location of the electrodes on the interfaces ... voltage therebetween. "
- d. In the abstract, delete the last sentence.

Applicant's Remarks filed September 8, 2005 have been received and the cancellation of claim 33 is noted. In addition, the updated drawings are approved.

Claims 1-11,18,20,22-30,34-39 and 41-46 are allowed for the following reasons:

The instant application is deemed to be directed to a non-obvious improvement over the invention patented in Pat. No. 6,665,014 to Assadi.

Independent claims 1, 6, 11 and 34 are allowed because the prior art of record, taken alone or in combination, fails to disclose or render obvious a photosensitive sol-gel derived thin film on a substrate including a channel, wherein the channel comprises a photodeposited metal oxide in combination with the rest of the limitations of the base claim.

Independent claim 41 is allowed because the prior art of record, taken alone or in combination, fails to disclose or render obvious a plurality of embedded waveguide channels wherein each waveguide channel comprises a different concentration of photodeposited metal oxide than that of the other waveguides in said plurality in combination with the rest of the limitations of the base claim.

Claims 2-5, 7-10, 18, 20, 22-30, 35-39 and 42-46 are allowed by virtue of their dependency upon claims 1, 6, 11, 34 and 41 respectively.

Assadi describes using a photosensitive sol-gel to form microlenses. It is silent with respect to a channel comprising a photodeposited metal oxide.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Kalivoda whose telephone number is (571) 272-2476. The examiner can normally be reached on Monday - Friday (8:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (571) 272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Cmk  
09/22/05

  
**KAVEH KIANNI  
PRIMARY EXAMINER**